



HOW-TO BOOKLET #3091

STARTING A LAWN



TOOL and MATERIAL CHECKLIST

- | | | |
|-------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> Grass Seed | <input type="checkbox"/> Starter Fertilizer | <input type="checkbox"/> Tine Rake |
| <input type="checkbox"/> Lawn Broom | <input type="checkbox"/> Fertilizer Spreader | <input type="checkbox"/> Garden Hoe |
| <input type="checkbox"/> Yardstick | <input type="checkbox"/> Spade | <input type="checkbox"/> Water |

Read This Entire How-To Booklet for Specific Tools and Materials Not Noted in The Basics Listed Above.

There are a couple of ways to start a new lawn from scratch:

- 🏠 Plant it yourself.
- 🏠 Have it sodded.
- 🏠 Have it spray-planted commercially.
- 🏠 Leave it to nature.

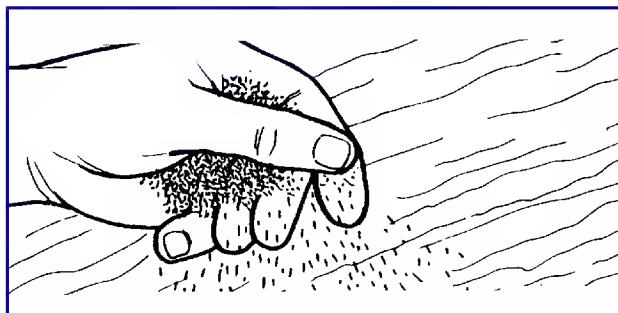
This How-To Booklet details how to plant a new lawn yourself right from the bare earth. Read the entire Booklet before you buy seed, equipment, or start to work. It can save you time and money. Also read How-To Booklet #3092, Greener Grass, for additional helpful information on soils and ground covers for specific areas of the Nation.

BUYING GRASS SEED

If you know how to read the label on a bag of grass seed, you can save yourself countless dollars and hours of hard work. The cheapie grass seed is indeed cheap—and full of weeds and other stuff that will take you months—even years—to eliminate in your lawn. Start with good seed, which is not inexpensive—but not cost prohibitive—and you'll be rewarded the minute the seed starts to sprout.

Here's how to read a grass seed label:

By law, growers and packagers of grass seed must print an analysis of the contents of each seed bag. The package label usually has six classifications stamped on it:



- 🏠 Purity.
- 🏠 Germination.
- 🏠 Crop.
- 🏠 Weeds.
- 🏠 Noxious weeds.
- 🏠 Inert matter.

What the label doesn't explain is what you need to know to get your seed money's worth.

PURITY. The basic type of seed will be named—for example, Kentucky bluegrass—and its percentage of the total weight will be given. There may be other types of seed listed—Victa, Windsor, Merion. These improved seeds are a big value. Look for at least 35% to 40% purity. The higher the percentage the better the seed will be.

Under the seed analysis, you will probably find two more categories: "Fine Textured Grasses" and "Coarse Textured Grasses." The fine-textured ones will be bluegrass, bentgrass, and fine fescue, including such strains as Windsor, Merion, and Victa. Under the coarse textured you will usually find a perennial ryegrass or another coarse-textured grass, such as redtop, timothy, tall fescue, or Kentucky 31. There should always be at least 40 percent of ryegrass or another strain of coarse grass in the package.

The purity percentage gives you an idea of quantity, but not quality, since even all pure seeds won't grow even under the best of conditions.

GERMINATION. The germination percentage, usually labeled "Germ.," tells you how much of the seed is capable of growth. If the germ figure is 85%, you can be fairly sure that about 85% of the seed will sprout. But keep in mind that this figure comes from laboratory tests under ideal conditions. Your yield may not be as high—or your yield may be somewhat higher. Remember, all seeds do not

germinate at the same time. As a rule of thumb, if the germ figure is 85%, you can expect an 80% to 85% growth under normal growing conditions.

CROP. Look out for this one. "Crop seeds," also listed as a percentage of the total weight, means just what the name implies: crops that a farmer grows (oats, wheat, rye). Therefore, the lower the crop percentage the better. If the crop seed is more than 5% by weight, the label must state the name of the crop seeds in the grass package.

WEEDS. All seed mixtures contain some weed seed. Obviously, the lower percentage of weed seed the better. Even 0.1% of chickweed in 1 pound of seed could result in 560,000 chickweed plants in a 10,000 sq. ft. lawn. When you buy a mixture with a high percentage of weed, you will also have to buy a lot of weed killer—and this can cost you plenty before the lawn-growing season is over.

NOXIOUS WEEDS. These weeds must be listed by name and by count on the label. Noxious weeds are more of a problem in farm fields than in home lawns. Classification varies from state to state. For example, *poa annua*, an annual bluegrass, is classified as noxious in several states. But to be on the safe side when looking for mixtures for your lawn, buy grass seed products that contain no noxious weed.

INERT MATTER. Inert matter is sand, ground-up corn cobs, empty seed hulls. It is there to add weight to the package and nothing more. Of course, the more inert matter, the less seed. Read the label carefully and buy a mixture with as small a percentage of inert matter as possible.

SEED DIFFERENCES

The growers and packagers of quality grass seed usually offer blends of seed suitable for different lawn conditions.

For example, one company offers a blend of bluegrasses to provide a deep rich color, high density, and thick texture. One blend is made especially for

shady areas; another is for lawns subject to hard use (baseball, touch football, lawn tennis, and so forth); still another is for covering bare spots with grass very quickly.

You can grow a very handsome new lawn by seeding it with about 2 pounds of quality seed for each 1000 sq. ft. We recommend that you overseed a new lawn slightly—another 1/2 pound per 1000 sq. ft. This takes up the margin of those seeds that won't germinate. The money here is well-spent. Note the emphasis on quality. With a cheap seed you will get lots of inert matter as well as weed seed, which you will have to control later either by hand-pulling or with chemicals.

ABOUT FERTILIZERS

Fertilizer is simply food for plants. Special "starter" fertilizers are available for brand new lawns, and the packages are usually so noted: "Starter." Stick with this starting fertilizer until the lawn is established. Then, you may want to switch to a different formula.

Many turf fertilizers contain nutrients balanced for different kinds of growth. The ratios of these different formulas are indicated on the package in numbers: 5-10-5; 20-6-6; 10-10-10; 1-1-1.

The first number stands for nitrogen, the second for phosphorus, and the third for potash. When you're buying fertilizer in a store, use this slogan to remember what the numbers mean: Up, down, and all around.

The first number means nitrogen, which makes the grass grown UP and green. It helps the grass leaves grow and develop, and adds to the quality and thickness of the turf grasses. Fertilizer manufacturers advertise products for quick greening in the spring months. If you read the labels on these packages, you'll see that the first number in the formula is high. For example, 18, 20, 22, or even 30, which means lots of nitrogen.

The second number means phosphorus, which

makes the grass grown **DOWN**. That is, it develops the root system and rhizomes. It helps the plants to develop quickly, and it speeds up the maturing of the plants. When the second number on the package is larger than the first number, or when it's larger than or equal to the third number, you know that the formula is designed to develop the root system of the plant.

The third number means potash, which makes the grass grow **ALL AROUND**. It's designed to help the grass stay healthy and hardy. It helps in development of rhizomes and delivers amino acid and proteins to the plants.

Some fertilizers contain other chemicals to control weeds, plant diseases, and insects. These products do double duty: they fertilize the plant and they control the plant's environment.

ABOUT THE SOIL

Since you're starting a new lawn, it's a smart idea to have the soil in the lawn tested for acid/alkaline content. The cost is not prohibitive and it could save you lots of time and trouble in the long haul. You can buy soil testing kits at home center stores and building material outlets that sell lawn and garden supplies. Most lawn & garden stores that specialize in plants inventory soil testing kits.

Or, you can have the county agricultural agent test the soil. The cost usually is under \$5.

To gather soil for a test, cut the soil to a depth of 6 inch (the depth of a plant bed or the root depth of many turf grasses). Just dig with a spade to expose the various levels of soil. Then cut a 1/2-inch-thick slab of soil from the edge of the hole. If your lot is especially large—more than an acre—take samples from different sections of the property. Mix the samples together in a bucket and use a small sample of the mixture for the test.

The number 7 on a pH scale is a neutral rating. Any rating below 7 means that the soil is acid. Any number higher than 7 means that the soil is alkaline, or sweet.

Turf grass does best, as a rule of thumb, in soil with a pH of 6.0 to 6.5.

SEEDING GUIDELINES

You can start a lawn from scratch with seed, by planting plugs, or by planting sprigs.

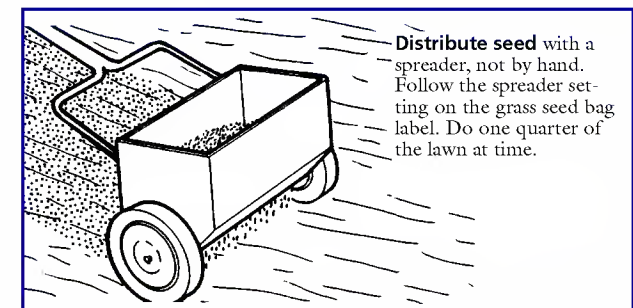
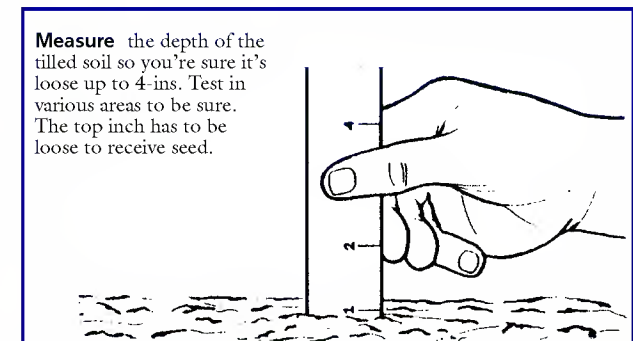
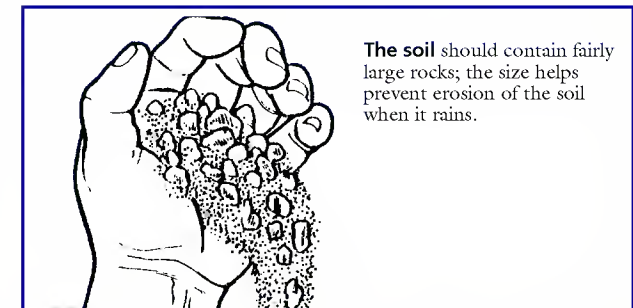
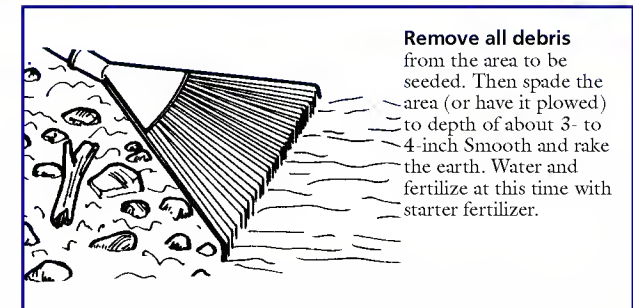
When you start from scratch, prepare the soil first. If the lawn area has lots of holes and hills—a building lot with a new house on it will have these—have a professional smooth out the dirt surface with a backhoe or blade mounted on a tractor. You can, of course, do this job yourself with a spade, hoe, and wheelbarrow, but plan on spending lots of time and effort. Even if you do the spade work, a final grading by a pro is a good investment.

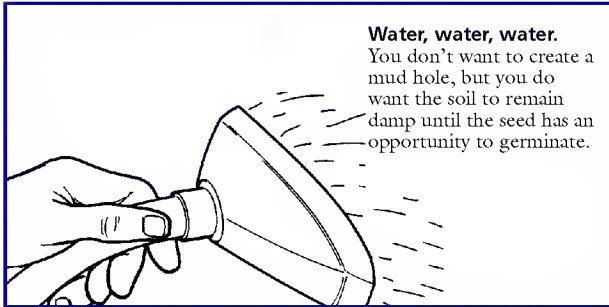
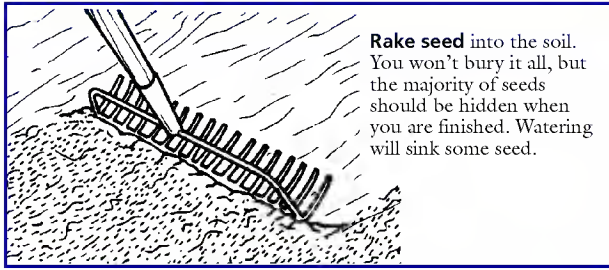
After leveling, remove all loose debris (sticks and stones) and prepare the soil for seeding. The earth should be tilled about 3 to 4 inches deep to loosen it. Then let the soil settle for a week or so. If it doesn't rain in this period, sprinkle the dirt with water to help settle it. But go easy. You don't want to turn the soil into hardpan.

After the soil has settled, fertilize the entire area with a quality new grass fertilizer. New grass fertilizer has a high phosphorus content, which helps establish a strong root system. Now sow the grass seed. Use a spreader with controls for seeding rather than broadcasting the seed with your hands or with a whirling mechanical device. A spreader distributes the seeds evenly over the ground, giving you correct, consistent coverage without waste. We do recommend that you over-seed slightly, as detailed above.

Divide the lawn into quarters and do one quarter at a time. After the seed is applied to one section, rake it down into the soil. Try to cover as much seed as possible with a reasonable amount of raking. Then do each of the other sections in the same way. It's much easier to keep track of your work by doing the seeding this way.

Water the earth lightly with a garden hose and nozzle on the light spray setting. You want the





ground damp, but not muddy. Keep watering daily and don't skimp on the water. If it rains, you can skip the watering procedure. However, we can't emphasize too much that plenty of water is needed to help the grass seed germinate.

Seed germination requires sunlight, moisture, and warmth. You can provide one of the three. If the seeds are not watered, they can't germinate—even if the other conditions are there.

Cut the grass when it reaches a height of about 3 inches. Keep the mower set between 2 and 2 1/2 inches until the lawn is fully established (about two years); then you can lower the cutting height to 1 1/2 inches for most grass. From 30 to 40 days after planting, use a quality starter fertilizer to fertilize the soil again.

As the lawn becomes established, continue to fertilize it, usually between February and April and again between August and October.

PLUGS AND SPRIGS

Plugging and sprigging are two ways to establish a

lawn without starting from seeds. Sometimes they're the only way to establish it, depending on the type of turf grass to be grown. Typical grasses are Zoysia, St. Augustine grass, Bahia grass, and Bermuda grass; some of these may be planted from seed as well as plugs and sprigs. The steps:

First, smooth and rake the soil so that all high and low spots are leveled. Then let the soil settle for a week or so. Go back over the soil with a rake, making sure all debris is removed. Rocks larger than golf balls should be removed; any rocks smaller than this are okay. In fact, small rocks are desirable since you want a soil mixture that has small and large particles to help prevent erosion.

After the soil is settled and raked, fertilize the soil, using a quality starter fertilizer. Spread it at the rate suggested on the fertilizer bag.

If you are sprigging, plant the sprigs at the intervals recommended by the retailer; generally, sprigs should be placed at 6 to 10 inch apart in cultivated soil.

If you are plugging, dig holes 3 inch deep for the plants at 8- to 12-inch intervals. Set the plugs firmly in the holes. After setting both sprigs and plugs, press the soil with your fingers to compact it against the root system. Water the area frequently so the earth stays damp, but don't make it muddy. In about 30 days, cover the area with another shot of starter fertilizer, applying the fertilizer at the rate recommended on the fertilizer bag.

LAYING SOD

Putting down freshly cut sod over a cultivated ground base probably is the quickest way to establish a new lawn. It is also the most expensive. Therefore, sod generally is used to fill bare spots quickly or to prevent soil erosion on freshly graded slopes and little hilly areas.

The first step is to cultivate the ground as you would for new seeding. Level it and remove all debris. Then fertilize the ground with a quality starter fertilizer applied at the rate suggested on the package label.

Start the first strips of sod up against a straight edge; a 2X4 or a line stretched between two stakes will work okay. Butt the ends of the sod lengths tightly together. As you progress along the area, stagger the ends and edges of the sod strips so there are no four-corner joints. A good pattern to follow is a brick wall with a running bond configuration. On slopes, peg the sod with two 1X2 stakes for each strip to prevent slippage.

Immediately after the sod is in place, water it and keep it damp for several weeks. Don't skimp on the water, but don't drown the grass either. The water gives the root system a chance to meld with the soil. It is best to overwater for the first week or so and then go to a normal watering regimen, since sod needs more water after it is first laid on cultivated ground. If during this watering period you spot a square of sod that is dying, remove it and replace it with a new section.

When the grass has grown about one third over its length when you first laid the strips, mow the grass to a 2-1/2-inch height. After four weeks, give the sod another starter fertilizer feeding. Then follow with regular mowing and feedings.

SEEDING BARE SPOTS

You can buy quick-cover grass seed to hide bare spots in the lawn. These covers consist mainly of annual ryegrass which sprouts fast, but dies out after the growing season. You also can seed with a quick cover plus a regular grass seed. The annual ryegrass helps the regular grass seed grow better because it protects the tender leaves from the sun.

To prepare bare spots, loosen or slice the soil to a depth of about 1/2-inch. Then apply lots of seed to the bare area. Cover the seed by pulling the back of a rake over the area; the idea is to work the seed into the ground. Water the spot for at least a week—14 to 18 days is better—to give the seed time to germinate. Water is essential. After this period, feed the area with starter fertilizer, if you haven't done so at the time of seeding.